

## Claims

What is claimed is:

1. A method for inserting a digital media advertisement in a digital multiplexed stream, the method comprising:

5 computing a rate profile associated with a program stream;

compressing the digital media advertisement according to the computed rate profile; and

10 inserting the compressed digital media advertisement in the digital mulitplexed stream at an advertising opportunity in the program stream.

2. The method of claim 1, wherein the rate profile is based on a predetermined bit rate.

15 3. The method of claim 2, wherein the predetermined bit rate profile comprises a maximum bit rate.

4. The method of claim 2, wherein the predetermined bit rate profile comprises a minimum bit rate.

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5. The method of claim 2, wherein the predetermined bit rate profile comprises a start point and an end point.

6. The method of claim 2, wherein the predetermined bit rate profile comprises insertion instructions.

7. The method of claim 2, wherein the predetermined bit rate profile comprises a time varying profile from the start point to the end point.

8. The method of claim 7, wherein the time varying profile can be modeled as a piecewise linear model.

9. The method of claim 4, wherein one or more null packets are inserted such that the sum of the minimum bit rate and the one or more null packets is equal to the predetermined bit rate.

10. A method of compressing digital media advertisements for insertion into a statistically multiplexed digital transmission stream containing a plurality of digital program streams with a plurality of advertising opportunities, the method comprising:

determining a first bit rate profile for a first advertising opportunity;

determining a second bit rate profile for a second advertising opportunity; and

5 specifying a predetermined bit rate profile for compression of a first advertisement and a second advertisement, wherein the predetermined bit rate profile provides a limit to the sum of the first bit rate profile and the second bit rate profile.

10 11. The method of claim 10, further comprising:

compressing the digital media advertisements according to the predetermined profile; and

15 inserting the compressed digital media advertisements into the statistically multiplexed digital transmission stream within the first and the second advertising opportunities.

12. The method of claim 10, wherein the predetermined bit rate profile specifies the instantaneous sum of the first bit rate profile and the second bit rate profile.

20 13. The method of claim 11, wherein the predetermined bit rate profile is the total bits from the start point to the end

